

ORIGINAL

OPEN MEETING

MEMORANDUM

RECEIVED



0000140883

2012 NOV 21 P 2: 04

Arizona Corporation Commission

DOCKETED
DOCKET CONTROL
NOV 21 2012

TO: THE COMMISSION

FROM: Utilities Division

DATE: November 21, 2012

RE: GARKANE ENERGY COOPERATIVE, INC. AND DIXIE ESCALANTE
RURAL ELECTRIC ASSOCIATION – APPLICATION FOR APPROVAL OF
TIME-OF-USE RATE SCHEDULES (DOCKET NO. E-01891A-08-0061 and E-
02044A-08-0061)



On April 15, 2009 and April 20, 2009, Garkane Energy Cooperative, Inc. ("Garkane") and Dixie-Escalante Rural Electric Association ("Dixie-Escalante") filed summary findings and recommendations regarding proposed Time-of-Use ("TOU") programs for their residential customers in compliance with Decision No. 69736 dated July 30, 2007. Decision No. 70696 (January 20, 2009) granted Garkane and Dixie-Escalante a temporary waiver of the requirement that they implement optional time-based rates.

Garkane and Dixie-Escalante currently utilize the Hunt Technologies/Landis & Gyr (L&G) TS 1 metering system. The TS 1 system limits the utilities ability to offer time-based rates to all of their customers because of the limited amount of information that can be sent and received. Currently they are only able to receive two register readings from the module using a commercial TS1 metering system. This means that they are unable to bill demand-based customers since the meter cannot transmit the data that are required (an on-peak and off-peak kWh and an on-peak and off-peak kW). To provide time-based rates to residential customers Garkane and Dixie-Escalante would have to install and program commercial meters since the residential meters are unable to bill time-based rates.

The companies estimate that it would cost approximately \$563-\$591 per customer to upgrade the current TS1 system to allow TOU billing, assuming 10% market penetration and 25% load shift. The cost rises to \$1,264-\$1,963 per customer if the utilities were to install the newer TS2 system. The companies also cite the load profile as reason against offering time-of-use, as the load profiles are generally very flat with no definitive peak.

On October 14, 2009, and October 20, 2009, Garkane and Dixie-Escalante filed tariffs in compliance with Decision No. 70696. Both Garkane and Dixie-Escalante use Deseret Generation and Transmission ("Deseret") as their primary supplier, which led them to use the same on-peak hours for their TOU tariffs. The proposed summer on-peak runs from 10 a.m. to 11 p.m. and includes the months from May to September. The winter on-peak runs from 6 a.m.

to 11 p.m. and includes the months from October to April. Table 1.1 is a comparison of Garkane's standard rate and its proposed TOU rate. Table 1.2 is a comparison of Dixie-Escalante standard rate and its proposed TOU rate.

Table 1.1 (Garkane)
Comparison of Standard and TOU Rates

	Existing non-TOU	Proposed TOU
Customer Charge per month	\$12.50	\$13.00
Standard rate per kWh (applied at all hours)	\$0.06907	
Colorado City Surcharge per kWh (applied to all hours)	\$0.037317	\$0.037317
On-Peak rate per kWh		\$0.1129
Off-Peak rate per kWh		\$0.0584
Summer Months (May-September)		
Summer On-Peak hours (all remaining hours on-peak)		10 a.m.-11 p.m. (All Days)
Winter Months (October-April)		
Summer On-Peak hours (all remaining hours on-peak)		6 a.m.-11 p.m. (All Days)

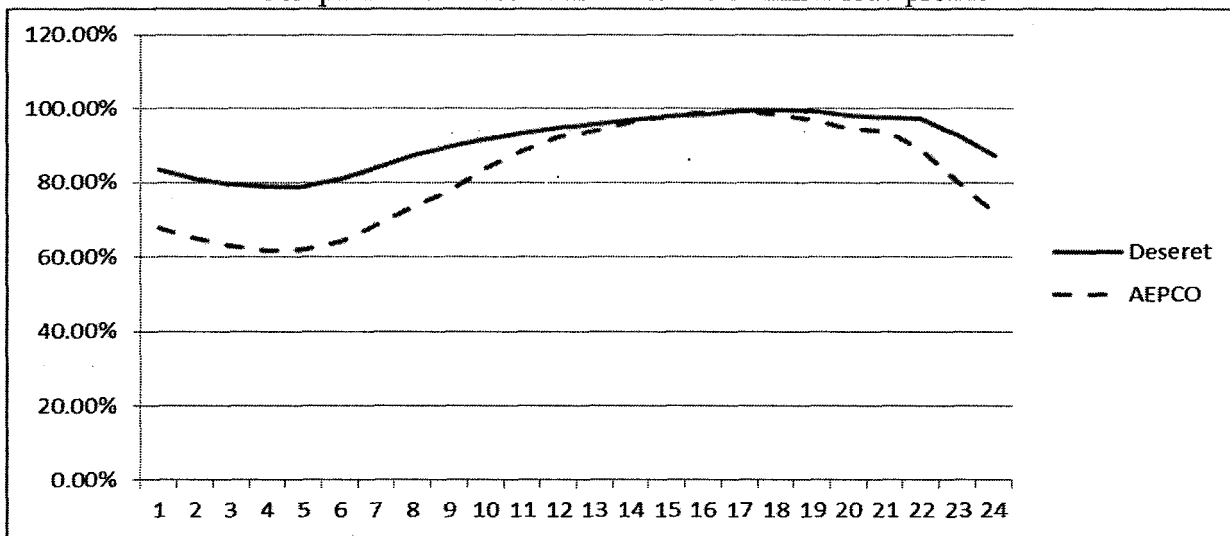
Table 1.2 (Dixie-Escalante)
Comparison of Standard and TOU Rates

	Existing non-TOU	Proposed TOU
Customer Charge per month	\$8.00	\$8.00
Standard rate per kWh for first 1500 kWh's	\$0.0535	
Standard rate per kWh for all additional kWh's	\$0.0425	
On-Peak rate per kWh		\$0.0843
Off-Peak rate per kWh		\$0.0334
Summer Months (May-September)		
Summer On-Peak hours (all remaining hours on-peak)		10 a.m.-11 p.m. (All Days)
Winter Months (October-April)		
Summer On-Peak hours (all remaining hours on-peak)		6 a.m.-11 p.m. (All Days)

Staff Analysis

Staff has reviewed the hourly data of Deseret that was provided by Garkane and Dixie-Escalante. Staff finds that the data supports long on-peak periods as proposed by Garkane and Dixie-Escalante. Graph 1 illustrates the typical summer load profile of Deseret and AEPCO. Deseret's load profile is atypical, when compared with AEPCO there are no distinctive valleys and peaks. This causes the need for long peak periods, which can be unattractive to many customers.

Graph 1
Comparison of Deseret and AEPCO summer load profile



Staff has also looked at the cost for Garkane and Dixie-Escalante to implement an Advanced Metering Infrastructure ("AMI"). Staff concurs with the companies on the cost of implementing AMI assuming a 10% market penetration and 25% load shift. However, Staff does not believe that Garkane and Dixie-Escalante will be able to achieve a 10% market penetration. Staff also believes the estimation of a 25% load shift is also high, due to the long peak periods that occur during the day. Table 2 illustrates the cost of upgrading the current TS1 system for TOU assuming different levels of market penetration.

Table 2
Cost per customer at different participation levels

Market Penetration	Cost per Customer (Dixie-Escalante)	Cost per Customer (Garkane)
1%	\$1,037.83	\$1,316.01
2%	\$769.37	\$913.50
3%	\$683.80	\$779.34
5%	\$614.85	\$672.00
10%	\$562.85	\$591.50

Staff does not believe that TOU is feasible or cost-effective for Garkane or Dixie-Escalante. The cost of upgrading their current metering infrastructure to accommodate residential TOU is high, as costs range from approximately \$562 to \$1,316 per customer depending on customer participation. The load profile for Deseret, their primary generator, is also poor for TOU as it is very flat which leads to long peak periods and makes it hard for customers to shift load and in turn save money.

Staff recommends that neither Garkane Energy Cooperative, Inc. nor Dixie-Escalante Rural Electric Association be required to offer time-of-use rate schedules at this time.



Steven M. Olea
Director
Utilities Division

SMO:PML:sms\CHH

ORIGINATOR: Patrick M. Lowe

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28

IN THE MATTER OF THE APPLICATION)
OF GARKANE ENERGY COOPERATIVE,)
INC. AND DIXIE ESCALANTE RURAL)
ELECTRIC FOR APPROVAL OF TIME-OF-)
USE RATE SCHEDULES)
)
)
)
)
)

ORDER

BY THE COMMISSION:

1. Garkane Energy Cooperative, Inc. and Dixie-Escalante Rural Electric Association are certificated to provide electric service as public service corporations in the state of Arizona.

2. On April 15, 2009 and April 20, 2009, Garkane Energy Cooperative, Inc. (“Garkane”) and Dixie-Escalante Rural Electric Association (“Dixie-Escalante”) filed summary findings and recommendations regarding proposed Time-of-Use (“TOU”) programs for their residential customers in compliance with Decision No. 69736 dated July 30, 2007. Decision No. 70696 (January 20, 2009) granted Garkane and Dixie-Escalante a temporary waiver of the requirement that they implement optional time-based rates.

3. Garkane and Dixie-Escalante currently utilize the Hunt Technologies/Landis & Gyr (L&G) TS 1 metering system. The TS 1 system limits the utilities ability to offer time-based rates

to all of their customers because of the limited amount of information that can be sent and received. Currently they are only able to receive two register readings from the module using a commercial TS1 metering system. This means that they are unable to bill demand-based customers since the meter cannot transmit the data that are required (an on-peak and off-peak kWh and an on-peak and off-peak kW). To provide time-based rates to residential customers Garkane and Dixie-Escalante would have to install and program commercial meters since the residential meters are unable to bill time-based rates.

4. The companies estimate that it would cost approximately \$563-\$591 per customer to upgrade the current TS1 system to allow TOU billing, assuming 10% market penetration and 25% load shift. The cost rises to \$1,264-\$1,963 per customer if the utilities were to install the newer TS2 system. The companies also cite the load profile as reason against offering time-of-use, as the load profiles are generally very flat with no definitive peak.

5. On October 14, 2009, and October 20, 2009, Garkane and Dixie-Escalante filed tariffs in compliance with Decision No. 70696. Both Garkane and Dixie-Escalante use Deseret Generation and Transmission ("Deseret") as their primary supplier, which led them to use the same on-peak hours for their TOU tariffs. The proposed summer on-peak runs from 10 a.m. to 11 p.m. and includes the months from May to September. The winter on-peak runs from 6 a.m. to 11 p.m. and includes the months from October to April. Table 1.1 is a comparison of Garkane's standard rate and its proposed TOU rate. Table 1.2 is a comparison of Dixie-Escalante standard rate and its proposed TOU rate.

Table 1.1 (Garkane)
Comparison of Standard and TOU Rates

	Existing non-TOU	Proposed TOU
Customer Charge per month	\$12.50	\$13.00
Standard rate per kWh (applied at all hours)	\$0.06907	
Colorado City Surcharge per kWh (applied to all hours)	\$0.037317	\$0.037317
On-Peak rate per kWh		\$0.1129
Off-Peak rate per kWh		\$0.0584

Decision No. _____

Summer Months (May-September)		
Summer On-Peak hours (all remaining hours on- peak)		10 a.m.-11 p.m. (All Days)
Winter Months (October-April)		
Summer On-Peak hours (all remaining hours on- peak)		6 a.m.-11 p.m. (All Days)

Table 1.2 (Dixie-Escalante)
Comparison of Standard and TOU Rates

	Existing non-TOU	Proposed TOU
Customer Charge per month	\$8.00	\$8.00
Standard rate per kWh for first 1500 kWh's	\$0.0535	
Standard rate per kWh for all additional kWh's	\$0.0425	
On-Peak rate per kWh		\$0.0843
Off-Peak rate per kWh		\$0.0334
Summer Months (May-September)		
Summer On-Peak hours (all remaining hours on-peak)		10 a.m.-11 p.m. (All Days)
Winter Months (October-April)		
Summer On-Peak hours (all remaining hours on-peak)		6 a.m.-11 p.m. (All Days)

Staff Analysis

6. Staff has reviewed the hourly data of Deseret that was provided by Garkane and Dixie-Escalante. Staff finds that the data supports long on-peak periods as proposed by Garkane and Dixie-Escalante. Graph 1 illustrates the typical summer load profile of Deseret and AEPCO. Deseret's load profile is atypical, when compared with AEPCO there are no distinctive valleys and peaks. This causes the need for long peak periods, which can be unattractive to many customers.

...

''''

''''

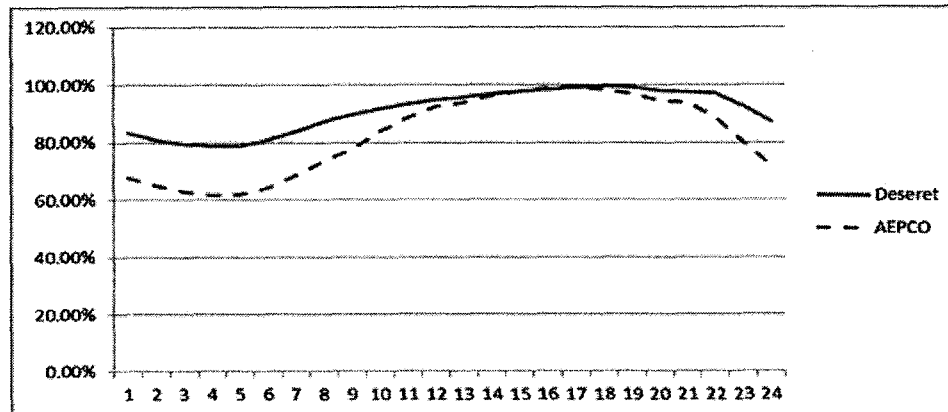
''''

Graph 1

Comparison of Deseret and AEPCO summer load profile

Decision No. _____

Graph 1
Comparison of Deseret and AEPCO summer load profile



7. Staff has also looked at the cost for Garkane and Dixie-Escalante to implement an Advanced Metering Infrastructure ("AMI"). Staff concurs with the companies on the cost of implementing AMI assuming a 10% market penetration and 25% load shift. However, Staff does not believe that Garkane and Dixie-Escalante will be able to achieve a 10% market penetration. Staff also believes the estimation of a 25% load shift is also high, due to the long peak periods that occur during the day. Table 2 illustrates the cost of upgrading the current TS1 system for TOU assuming different levels of market penetration.

Table 2
Cost per customer at different participation levels

Market Penetration	Cost per Customer (Dixie-Escalante)	Cost per Customer (Garkane)
1%	\$1,037.83	\$1,316.01
2%	\$769.37	\$913.50
3%	\$683.80	\$779.34
5%	\$614.85	\$672.00
10%	\$562.85	\$591.50

8. Staff does not believe that TOU is feasible or cost-effective for Garkane or Dixie-Escalante. The cost of upgrading their current metering infrastructure to accommodate residential TOU is high, as costs range from approximately \$562 to \$1,316 per customer depending on customer participation. The load profile for Deseret, their primary generator, is also poor for TOU as it is very flat which leads to long peak periods and makes it hard for customers to shift load and in turn save money.

Staff Recommendation

9. Staff has recommended that neither Garkane Energy Cooperative, Inc. nor Dixie-Escalante Rural Electric Association offer time-of-use rate schedules.

CONCLUSIONS OF LAW

1. Garkane Energy Cooperative, Inc. and Dixie-Escalante Rural Electric Association are Arizona public service corporations within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over Garkane Energy Cooperative, Inc. and Dixie-Escalante Rural Electric Association and over the subject matter of the application.

3. The Commission, having reviewed the utilities' application and Staff's memorandum dated November 21, 2012, concludes that it is in the public interest for Garkane Energy Cooperative, Inc. and Dixie-Escalante Rural Electric Association to not offer time-of-use rates.

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

ORDER

IT IS THEREFORE ORDERED that neither Garkane Energy Cooperative, Inc. nor Dixie-
Escalante Rural Electric Association offer time-of-use rate schedules at this time.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN

COMMISSIONER

COMMISSIONER

COMMISSIONER

COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,
Executive Director of the Arizona Corporation Commission,
have hereunto, set my hand and caused the official seal of this
Commission to be affixed at the Capitol, in the City of Phoenix,
this _____ day of _____, 2012.

ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT: _____

DISSENT: _____

SMO:PML:sms\CHH

1 SERVICE LIST FOR: Garkane Energy Cooperative, Inc. and Dixie-Escalante Rural Electric
Association

2 DOCKET NO. E-01891A-08-0061 and E-02044A-08-0061

3
4 Mr. Michael M. Grant
Gallagher and Kennedy, P.A.
5 2575 E. Camelback Rd.
Phoenix, Arizona 85016-9225

6
7 Mr. Carl Albrecht
Garkane Energy Cooperative, Inc
8 120 West 300 South
P.O. Box 465
9 Loa, UT 84747

10 LaDel Laub
11 Dixie-Escalante Rural Electric Association
71 East Hwy 56
12 Beryl, UT 84714-5197

13 Mr. Steven M. Olea
Director, Utilities Division
14 Arizona Corporation Commission
1200 West Washington Street
15 Phoenix, Arizona 85007

16 Ms. Janice M. Alward
17 Chief Counsel, Legal Division
Arizona Corporation Commission
18 1200 West Washington Street
19 Phoenix, Arizona 85007